

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/706,177 Confirmation No. : 6117  
Applicant : Akram A. Bou-Ghannam  
Filed : November 12, 2003  
TC/A.U. : 2195  
Examiner : Holloway, David A.  
Docket No. : BOC9-2003-0046 (417)

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Thomas E. Creamer, a citizen of the United States, residing in Boca Raton, Florida, hereby declare and state as follows:

1. I was employed by International Business Machines Corporation (IBM) of Armonk, New York at the time the above-identified application was conceived. I make this declaration in support the above-identified application.

2. IBM has invested substantial time and effort into the research, development, and marketing of their products, and in an effort to protect its rights in all new inventions, IBM requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).

3. As a named co-inventor for this invention, I and my co-inventor prepared and submitted the attached Invention Disclosure No. BOC8-2002-0129 (hereinafter "Invention Disclosure") pursuant to IBM guidelines.

4. The Invention Disclosure was originally submitted for consideration to an IBM Attorney/Patent Professional for preparation of a patent application on December 12, 2002, and was insubstantially modified on December 16, 2002. The content of the Invention Disclosure has not been subsequently modified. The Invention Disclosure represents a fully conceived and workable invention as written. I reviewed the claims of the above-mentioned patent application prior to submission of the application to assure the claimed invention was fully supported by the

Invention Disclosure in light of the Invention Disclosure and art known at the time of the disclosure.

5. I diligently worked with outside counsel to prepare and file the above-mentioned patent application.

6. I make this Declaration to establish that my co-inventor and I conceived of the present invention at least as early as December 12, 2002, and exercised due diligence from that date to the date of filing for the above-identified patent application.

7. I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified patent application or any patent issuing thereon.

  
Thomas E. Creamer

Date: 11-19-2007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/706,177 Confirmation No. : 6117  
Applicant : Akram A. Bou-Ghannam  
Filed : November 12, 2003  
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Docket No. : BOC9-2003-0046 (417)

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**DECLARATION UNDER 37 C.F.R. § 1.131**

---

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Victor S. Moore, a citizen of the United States, residing in Lake City, Florida, hereby declare and state as follows:

1. I was employed by International Business Machines Corporation (IBM) of Armonk, New York at the time the above-identified application was conceived. I make this declaration in support the above-identified application.
2. IBM has invested substantial time and effort into the research, development, and marketing of their products, and in an effort to protect its rights in all new inventions, IBM requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).
3. As a named co-inventor for this invention, I and my co-inventor prepared and submitted the attached Invention Disclosure No. BOC8-2002-0129 (hereinafter "Invention Disclosure") pursuant to IBM guidelines.
4. The Invention Disclosure was originally submitted for consideration to an IBM Attorney/Patent Professional for preparation of a patent application on December 12, 2002, and was insubstantially modified on December 16, 2002. The content of the Invention Disclosure has not been subsequently modified. The Invention Disclosure represents a fully conceived and workable invention as written. I reviewed the claims of the above-mentioned patent application prior to submission of the application to assure the claimed invention was fully supported by the

Invention Disclosure in light of the Invention Disclosure and art known at the time of the disclosure.

5. I diligently worked with outside counsel to prepare and file the above-mentioned patent application.

6. I make this Declaration to establish that my co-inventor and I conceived of the present invention at least as early as December 12, 2002, and exercised due diligence from that date to the date of filing for the above-identified patent application.

7. I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified patent application or any patent issuing thereon.

\_\_\_\_\_  
Victor S. Moore

Date: \_\_\_\_\_

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/706,177 Confirmation No. : 6117  
Applicant : Akram A. Bou-Ghannam  
Filed : November 12, 2003  
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---

**DECLARATION UNDER 37 C.F.R. § 1.131**

---

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Scott L. Winters, a citizen of the United States, residing in Austin, Texas, hereby declare and state as follows:

1. I was employed by International Business Machines Corporation (IBM) of Armonk, New York at the time the above-identified application was conceived. I make this declaration in support the above-identified application.
2. IBM has invested substantial time and effort into the research, development, and marketing of their products, and in an effort to protect its rights in all new inventions, IBM requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).
3. As a named co-inventor for this invention, I and my co-inventor prepared and submitted the attached Invention Disclosure No. BOC8-2002-0129 (hereinafter "Invention Disclosure") pursuant to IBM guidelines.
4. The Invention Disclosure was originally submitted for consideration to an IBM Attorney/Patent Professional for preparation of a patent application on December 12, 2002, and was insubstantially modified on December 16, 2002. The content of the Invention Disclosure has not been subsequently modified. The Invention Disclosure represents a fully conceived and workable invention as written. I reviewed the claims of the above-mentioned patent application prior to submission of the application to assure the claimed invention was fully supported by the

Invention Disclosure in light of the Invention Disclosure and art known at the time of the disclosure.

5. I diligently worked with outside counsel to prepare and file the above-mentioned patent application.

6. I make this Declaration to establish that my co-inventor and I conceived of the present invention at least as early as December 12, 2002, and exercised due diligence from that date to the date of filing for the above-identified patent application.

7. I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified patent application or any patent issuing thereon.

\_\_\_\_\_  
Scott L. Winters

Date: \_\_\_\_\_

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/706,177 Confirmation No. : 6117  
Applicant : Akram A. Bou-Ghannam  
Filed : November 12, 2003  
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---

**DECLARATION UNDER 37 C.F.R. § 1.131**

---

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Akram A. Boughannam, a citizen of the United States, residing in Lakeworth, Florida, hereby declare and state as follows:

1. I was employed by International Business Machines Corporation (IBM) of Armonk, New York at the time the above-identified application was conceived. I make this declaration in support the above-identified application.
2. IBM has invested substantial time and effort into the research, development, and marketing of their products, and in an effort to protect its rights in all new inventions, IBM requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).
3. As a named co-inventor for this invention, I and my co-inventor prepared and submitted the attached Invention Disclosure No. BOC8-2002-0129 (hereinafter "Invention Disclosure") pursuant to IBM guidelines.
4. The Invention Disclosure was originally submitted for consideration to an IBM Attorney/Patent Professional for preparation of a patent application on December 12, 2002, and was insubstantially modified on December 16, 2002. The content of the Invention Disclosure has not been subsequently modified. The Invention Disclosure represents a fully conceived and workable invention as written. I reviewed the claims of the above-mentioned patent application prior to submission of the application to assure the claimed invention was fully supported by the

Invention Disclosure in light of the Invention Disclosure and art known at the time of the disclosure.

5. I diligently worked with outside counsel to prepare and file the above-mentioned patent application.

6. I make this Declaration to establish that my co-inventor and I conceived of the present invention at least as early as December 12, 2002, and exercised due diligence from that date to the date of filing for the above-identified patent application.

7. I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified patent application or any patent issuing thereon.

\_\_\_\_\_  
Akram A. Boughannam

Date: \_\_\_\_\_



6169-417



## Disclosure BOC8-2002-0129

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By Akram Boughannam On 12/12/2002 12:42:01 PM MST  
Last Modified By Elaine Venturelli On 12/16/2002 05:10:23 PM EST

Required fields are marked with the asterisk (\*) and must be filled in to complete the form.

### \*Title of disclosure (in English)

A scheduler for Pattern Based Web Services

### Summary

|                              |  |
|------------------------------|--|
| Status                       | Under Evaluation   |
| Final Deadline               |  |
| Final Deadline Reason        |  |
| *Processing Location         | Boca Raton   |
| *Functional Area             | select <del>SWG Solutions and Integration (Corporate)</del>  |
| Attorney/Patent Professional | <del>Richard Tomlin/Boca Raton/IBM</del>   |
| IDT Team                     | select <del>Andrew Smith/Austin/IBM</del><br><del>James Smith/Austin/IBM</del><br><del>Richard Tomlin/Boca Raton/IBM</del> |
| Submitted Date               | 12/13/2002 12:45:25 PM MST   |
| *Owning Division             | select <del>SWG</del>  |
| Incentive Program            |  |
| Lab                          |  |
| *Technology Code             | <del>00120</del>   |
| PVT Score                    |  |

### Inventors with a Blue Pages entry

Inventors: Akram Boughannam/~~00120~~/IBM, Vic Moore/~~00120~~/IBM, Tom Creamer/~~00120~~/IBM, Scott Winters/~~00120~~/IBM

| Inventor Name       | Inventor Serial  | Div/Dept         | Inventor Phone   | Manager Name              |
|---------------------|------------------|------------------|------------------|---------------------------|
| > Boughannam, Akram | <del>00120</del> | <del>00120</del> | <del>00120</del> | <del>Richard Tomlin</del> |
| Moore, Victor S.    | <del>00120</del> | <del>00120</del> | <del>00120</del> | <del>James Smith</del>    |
| Creamer, Thomas E.  | <del>00120</del> | <del>00120</del> | <del>00120</del> | <del>James Smith</del>    |
| Winters, Scott L.   | <del>00120</del> | <del>00120</del> | <del>00120</del> | <del>James Smith</del>    |

> denotes primary contact

### Inventors without a Blue Pages entry

### IDT Selection

Attorney/Patent

~~Richard Tomlin/Boca Raton/IBM~~

Professional  
IDT Team

### \*Main Idea

1. Background: What is the problem solved by your invention? Describe known solutions to this problem (if any). What are the drawbacks of such known solutions, or why is an additional solution required? Cite any relevant technical documents or references.

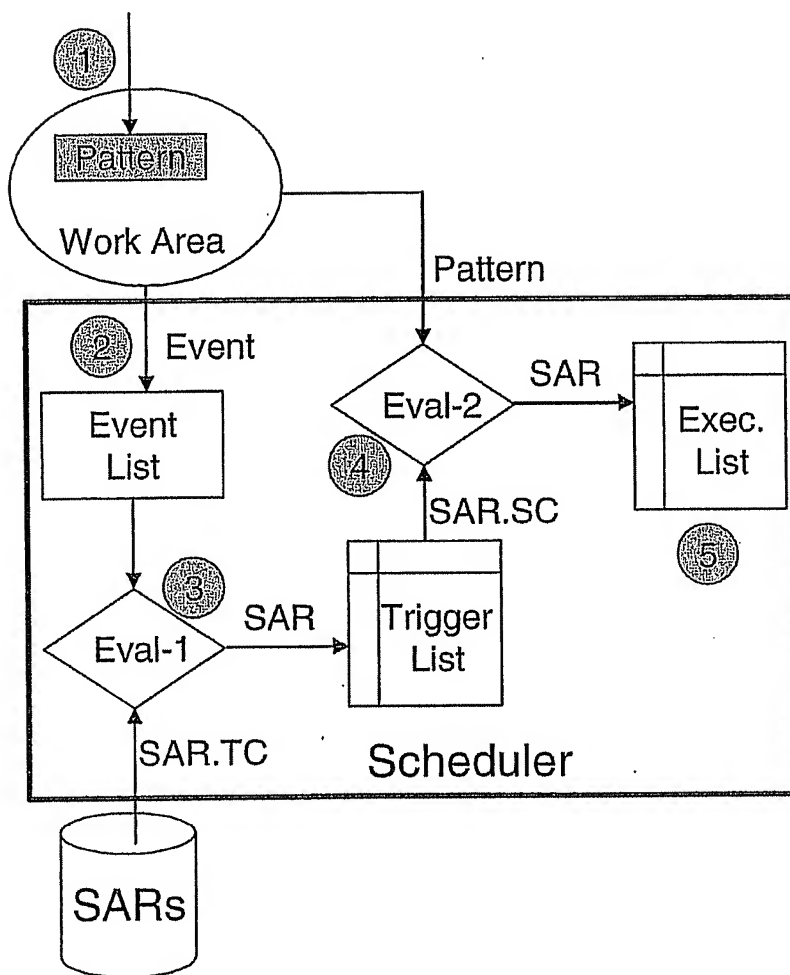
This invention describes a methodology for scheduling pattern based web services, described in a previous disclosure entitled "Pattern Based Web Services" [1]. The scheduling methodology described in this invention uses the rule pattern described in another earlier disclosure entitled "Method for web services registration enabling dynamic composition of web services." [2]

2. Summary of Invention: Briefly describe the core idea of your invention (saving the details for questions #3 below). Describe the advantage(s) of using your invention instead of the known solutions described above.

The scheduling methodology presented in this disclosure describes a framework and a methodology for evaluating the Watchers' rules against the pattern(s) in the work area. The result of the scheduler's evaluation cycle includes a list of all services that should be invoked. That is, the services whose rules match the pattern in the work area.

3. Description: Describe how your invention works, and how it could be implemented, using text, diagrams and flow charts as appropriate.

The description of the invention refers to figure 1 below. The scheduler determines what the next action to take (that is, it determines what Watcher/service to evoke) every time the state of the work area changes. The scheduler cycle is initiated by the action of changing the state of the work area (step 1, figure 1). Any of the watchers or the request servlet can add or change a pattern in the work area. The action of adding or changing any pattern to the work area produces a set of events (step 2, figure 1). These events describe what patterns have been added to the work area and/or what attributes of any patterns on the work area have been changed. For example, if an new pattern of type X is added to the work area, the following event will be produced: (ADDED PATTERN TYPE X). The scheduler evaluates (step 3, figure 1) every event on the event list against the trigger conditions of all service activation rules (SARs). The SARs are described in [2]. Every watcher must register with the system and provide its own set of service activation rules. The set of all SARs for all the watchers is shown in figure 1. An SAR has a Trigger Condition part and a State Condition part. The Trigger Condition is a logical expression that describes an event that must happen in the system before a service (watcher) can be considered for activation. For example, assume service A knows how to satisfy service requests relating to pattern X. Service A will then register with the system and specify an SAR (say SAR-n) with a Trigger Condition such as: (ADDED PATTERN TYPE X). This is service A's way of saying: "consider me for action if anyone adds a pattern of type x to the work area". In step 3 of figure 1, the scheduler evaluates all events against all the Trigger Conditions. Any SAR whose Trigger Condition match any event as a result of step 3 will be placed on the Trigger List. In the next step (step 4), the scheduler matches the State Conditions of all the SARs on the Trigger List to all the patterns in the work area. The State Condition is a logical expression that describes the state of the work area. A State Condition might specify a certain state of a pattern in the work area. For example, "if the status attribute of pattern X is ready". This could be stated in the following representation: (= X.status READY). At this point in time, the service (SAR) should be considered for execution if its State Condition is satisfied. The scheduler places on the Executable List any SAR whose State Condition is matched in step 4. At the end of the cycle, the Executable List holds all SARs that must be executed to move the problem solving process forward. The process of executing an SAR (with corresponding Watchers and services) causes the Watchers to change the Work Area, and thus starting the scheduling cycle once again.



A simple scheduler must evaluate the state of the work area against all the rules corresponding to all the watchers in the system. However, this approach of evaluating the work area against all the rules is not efficient and will lead to performance degradation. The approach described by this invention provides a more efficient scheduler that eliminates the need to evaluate all of the rules against all of the work area by using the rule structure described in invention [2], and by dividing the evaluation process into two major steps. The first only evaluates the latest events (changes to the work area) against the trigger conditions of all the rules. The second only evaluates the rules that passed the first evaluation against the patterns in the work area. This is more efficient and results in large performance savings.

\*Patent Value Tool

REDACTED

REDACTED

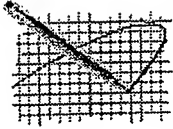
REDACTED

**\*PVT II**  
**Post Disclosure Text & Drawings**

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Form Revised 09/01/02)

# EXHIBIT "A"



Akram Boughannam

05/27/2003 07:17 PM

This document expires on  
08/25/2003

To: Elaine Venturelli/Boca Raton/IBM@IBMUS  
cc: Richard Tomlin/Boca Raton/IBM@IBMUS  
From: Akram Boughannam/Fort Lauderdale/IBM@IBMUS  
Subject: Invention Disclosures' Patent Search

Hi Elaine,

This relates to the following invention disclosures:

BOC8-2002-0126, BOC8-2002-0127, BOC8-2002-0129.

6169-415      6169-416      6169-417

As I discussed with Dick today, he asked me to send you this note confirming that I agree with the Search Report findings for the sections on "Which Search Features Were Not Found?". Following is the findings answering this question, as they appear in the Search report:

For #126:

"Providing the Watchers and their components for monitoring the patterns, parallel accessing to patterns, associating the Watchers with pattern objects, evoking the applications which are satisfied both the rules and services for each pattern object, and providing a "time out" message signal for a successful completion."

For #127

"Providing a list for the register Watchers which are matched with the associated pattern objects and saving the list as an entry within a cache."

For #129

"Comprising the scheduler cycles, the set of events, the Service Activation Rules (SARs) having a Trigger Condition part and a State Condition part, the set of all SARs, the Executable List, and the evaluation process for Step 1 and 2."

Regards,

Akram

Akram Bou-Ghannam, Ph.D.

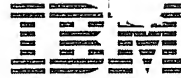
Business Integration Architecture

IBM Software Group, 8051 Congress Ave., Boca Raton, FL 33487

Tel. (561) 862-2744, T/L 975-2744, Fax (561) 862-3323

akram@us.ibm.com

EXHIBIT "B"



8051 Congress Avenue  
Boca Raton, FL 33487

6169-417  
11/24/03

May 28, 2003


Akerman, Senterfitt  
222 Lakeview Avenue  
Suite 400  
West Palm Beach, FL 33401

REF: Invention Disclosure: BOC8-2002-0129  
Title: A scheduler for Pattern Based Web Services  
IBM Docket: BOC9-2003-0046

Dear Kevin,

Please prepare and file the above referenced case with the U.S. Patent and Trademark Office. A copy of the invention disclosure, patentability search results and inventor's comments are enclosed for your use in preparation of the application in accordance with IBM's format.

Sincerely,

  
Richard A. Tomlin

Enclosures

RECEIVED  
DOCKETING

MAY 29 2003

AKERMAN SENTERFITT, P.A.

EXHIBIT "C"



Boca Raton  
Fort Lauderdale  
Jacksonville  
Miami  
Orlando  
Tallahassee  
Tampa  
West Palm Beach

222 Lakeview Avenue  
4th Floor  
West Palm Beach, Florida 33401-6147  
Post Office Box 3188 *mail*  
West Palm Beach, Florida 33402-3188  
[www.akerman.com](http://www.akerman.com)  
561 653.5000 *tel* 561 659 6313 *fax*

Direct Dial: 561-671-3658  
E-Mail: [kcuenot@akerman.com](mailto:kcuenot@akerman.com)

May 30, 2003

Richard A. Tomlin, Esquire  
IBM Corporation  
8051 Congress Avenue  
IMAD 4041  
Boca Raton, FL 33487

RE: New U.S. Patent Application  
A SCHEDULER FOR PATTERN BASED WEB SERVICES  
IBM Docket No. BOC9-2003-0046; Our Reference No.: 6169-417

Dear Dick:

Thank you for your letter dated May 28, 2003. In accordance with IBM standard protocol, a patent application will be prepared and filed in the above-referenced matter on or before November 24, 2003. Notwithstanding, we will strive to prepare the patent application in an expedient manner.

As always, thank you for allowing us to be of assistance to you.

Very truly yours,

AKERMAN SENTERFITT

Kevin T. Cuenot

KTC/vb



EXHIBIT "D"

**From:** Valee Bartels  
**To:** Bou-Ghannam, Akram A.; Creamer, Thomas E.; Moore, Victor S.; Winters, Scott L.  
**Date:** 9/30/03 5:09PM  
**Subject:** IBM Docket No. BOC9-2003-0046; Our Docket No. 6169-417

Re: Draft Patent Application for METHOD, SYSTEM, AND APPARATUS FOR SCHEDULING PATTERN  
BASED WEB SERVICES  
IBM Docket No. BOC9-2003-0046; Our Docket No. 6169-417

Dear Inventors:

Attached please find a draft of a patent application and associated drawings for your review in the above-identified matter. Please review the application carefully to ensure that the description of the invention accurately recites all of the invention's characteristics in the broadest possible manner, while also explaining, in detail, the preferred embodiment of the invention. The drawings should also be reviewed to confirm that they accurately depict the various details of the invention as you and your co-inventors understand them.

Importantly, please ensure that each inventor named on the cover sheet of the patent application has contributed to the conception of your invention as described in at least one of these claims. If for some reason we have neglected to list an inventor who has contributed to the conception of subject matter described in a claim, please so advise us immediately.

Once you have reviewed it, please forward your comments and/or any suggestions you may have.

Very truly yours,

AKERMAN SENTERFITT

Kevin T. Cuenot, Esquire\*  
Akerman Senterfitt  
222 Lakeview Avenue, Suite 400  
West Palm Beach, FL 33402-3188  
Voice: (561) 671-3658  
Fax: (561) 659-6313  
E-mail: [kcuenot@akerman.com](mailto:kcuenot@akerman.com)  
Web: [www.akerman.com](http://www.akerman.com)  
\*Licensed to Practice Before the United States Patent and Trademark Office

Sent on Mr. Cuenot's behalf to avoid delay.

Valee Bartels  
Legal Assistant to Kevin T. Cuenot  
Akerman, Senterfitt & Eidson, P.A.  
222 Lakeview Avenue, Suite 400  
West Palm Beach, FL 33401  
Ph: 561.653.5000, ext. 3434  
Fax: 561.659.6313  
E-mail: [vbartels@akerman.com](mailto:vbartels@akerman.com)

**CC:** Buchheit, Brian; Cuenot, Kevin T.; Venturelli, Elaine

**Valee Bartels - Re: Fw: IBM Docket No. BOC9-2003-0046; Our Docket No. 6169-417**

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**From:** Kevin T. Cuenot  
**To:** Boughannam, Akram; Buchheit, Brian; Esquivel, Melanie; Venturelli, Elaine  
**Date:** 10/20/2003 6:18 PM  
**Subject:** Re: Fw: IBM Docket No. BOC9-2003-0046; Our Docket No. 6169-417  
**CC:** Creamer, Tom; Moore, Vic; Winters, Scott

---

Akram,

Sounds great. Thanks for your help.

Best regards,  
Kevin

Kevin T. Cuenot  
Akerman Senterfitt  
222 Lakeview Avenue, Suite 400  
West Palm Beach, FL 33401  
(561) 671-3658 (Phone)  
(561) 659-6313 (Fax)  
E-Mail: [kcuenot@akerman.com](mailto:kcuenot@akerman.com)

>>> "Akram Boughannam" [akram@us.ibm.com](mailto:akram@us.ibm.com) > 10/20/03 05:57PM >>

Hi Kevin, I reviewed the changes and I believe it is now ready for signatures.  
Melanie has printed out the signature pages and she will handle the signature process.. I will sign the formal documents tomorrow, when she is back in the office.

Regards,

Akram

Akram Bou-Ghannam, Ph.D.  
Business Integration Architecture  
IBM Software Group, 8051 Congress Ave., Boca Raton, FL 33487  
Tel. (561) 862-2744, T/L 975-2744, Fax (561) 862-3323  
[akram@us.ibm.com](mailto:akram@us.ibm.com)  
----- Forwarded by Akram Boughannam/Boca Raton/IBM on  
10/20/2003 05:10 PM -----

"Valee Bartels" <[VBartels@Akerman.com](mailto:VBartels@Akerman.com)> on 10/20/2003 09:57:00 AM

To: Akram Boughannam/Boca Raton/IBM@IBMUS, Tom Creamer/Fort Lauderdale/IBM@IBMUS, Scott Winters/Austin/IBM@IBMUS, Vic Moore/Fort Lauderdale/IBM@IBMUS  
cc: "Brian Buchheit" <[BBuchheit@Akerman.com](mailto:BBuchheit@Akerman.com)>, "Kevin T. Cuenot" <[KCuenot@Akerman.com](mailto:KCuenot@Akerman.com)>, Melanie Esquivel/Boca Raton/Contr/IBM@ibmus, Elaine Venturelli/Boca Raton/IBM@IBMUS

Subject: IBM Docket No. BOC9-2003-0046; Our Docket No. 6169-417

Re: Final Draft Patent Application for METHOD, SYSTEM, AND APPARATUS FOR SCHEDULING PATTERN BASED WEB SERVICES  
IBM Docket No. BOC9-2003-0046; Our Docket No. 6169-417

Dear Inventors:

Enclosed please find for execution a final draft of the above-identified patent application, the Declaration and Power of Attorney, the Assignment, the Oath and Assignment for the Republic of China, a REDLINED version and of the patent which evidences the changes you have requested and which have been incorporated into the final version as well as the drawings.

After your review of the REDLINED patent application and drawings, if the patent application accurately recites all of the invention's characteristics, by copy of this e-mail to Melanie Esquivel, please print out the formal documents and sign and date the enclosed documents where indicated.

Once the documents are fully executed, Ms. Esquivel can forward the documents to our office for filing with the patent application.

Finally, if you feel we have not fully addressed your concerns, please do not hesitate to contact us prior to executing the documents.

Very truly yours,

AKERMAN SENTERFITT

Kevin T. Cuenot, Esquire\*  
Akerman Senterfitt  
222 Lakeview Avenue, Suite 400  
West Palm Beach, FL 33402-3188  
Voice: (561) 671-3658  
Fax: (561) 659-6313  
E-mail: [kcuenot@akerman.com](mailto:kcuenot@akerman.com)  
Web: [www.akerman.com](http://www.akerman.com)  
\*Licensed to Practice Before the  
United States Patent and Trademark Office

Sent on Mr. Cuenot's behalf to  
avoid delay

Valee Bartels  
Legal Assistant to Kevin T. Cuenot  
and Brian K. Buchheit  
Akerman, Senterfitt & Eidson, P.A.  
222 Lakeview Avenue, Suite 400  
West Palm Beach, FL 33401  
Ph: 561.653.5000, ext. 3434  
Fax: 561.659.6313  
E-mail: [vbartels@akerman.com](mailto:vbartels@akerman.com)

---

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---

\*\*\*\*\*Attachment(s) have been removed\*\*\*\*\*

**International Business Machines Corporation  
Intellectual Property Law Department**

6169-417

**TELEFAX TRANSMISSION**

**TRANSMITTED TO:**

**DATE: 10 / 16 / 2003**

**Name:** Kevin Cuenot  
**Company:** Akerman, Senterfitt & Eidson, P.A.  
**Street, Rm/FI:** 222 Lakeview Avenue, Suite 400  
**State, Zip:** West Palm Beach, FL 33401-6147  
**Telephone:** 561-671-3658  
**Fax Number:** 561-659-6313

**TRANSMITTED FROM:**

**Name:** Elaine Venturelli  
**Address:** Intellectual Property Law Dept.  
051-1/QPZ, Internal Zip 2106  
1798 N.W. 40th Street  
Boca Raton, Florida 33431  
**City, State, Zip:**  
**Telephone:** (561) 443-9717  
**Fax Number:** (561) 443-8544  
**e-mail Address:** EVENTURE@US.IBM.COM

**MESSAGE:**

Kevin, attached is the additional information you discussed with Akram for BOC9-2003-0046 (417). Please let me know if you need further information.

**THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED, AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US AT THE ADDRESS ABOVE VIA THE U.S. POSTAL SERVICE. THANK YOU.**

Total Pages \_\_\_(including this one)

300

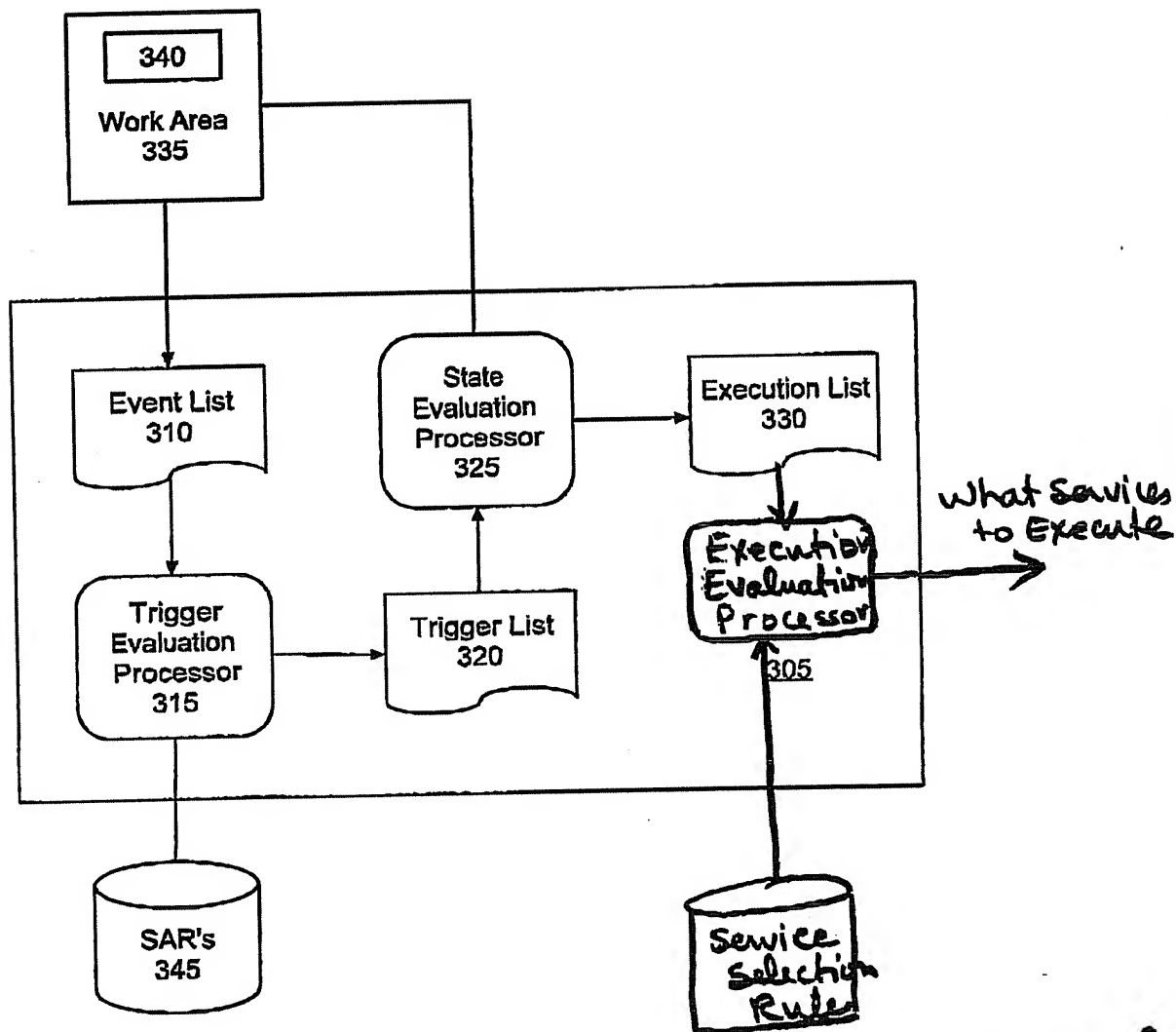


FIG. 3

could be user (Service Request) Preferences (Rules) or Common Sense heuristics that help determine which service to execute in cases when competitive services are placed on the Execution List.

**Valee Bartels - Re: BOC9-2003-0045/6169-416**

---

**From:** "Melanie Esquivel" <esquim@us.ibm.com>  
**To:** "Valee Bartels" <VBartels@Akerman.com>  
**Date:** 10/22/2003 7:42 AM  
**Subject:** Re: BOC9-2003-0045/6169-416

---

Valee,

Update: BOC9-2003-0045 (416) and BOC9-2003-0046 (417).

I'm waiting for Vic Moore to come in on Friday to sign them both, (he's traveling)...

Then, on BOC9-2003-0046 (417), I have to Airborne it to Scott Winters in Austin.  
I'm working on them, I'll keep you posted....

Thanks,

Melanie Esquivel  
Assistant to:  
Elaine Venturelli, IP Law  
Guy L. Catullo, Nat'l Channels Mgr. Enterprise Storage Solutions  
Kimberly M. Davis, SME Regional Channels Manager  
William Cramsie, Solution Studio Team  
T/L: 975-2734 or 561-862-2734 esquim@us.ibm.com  
Visit the Sales Support Web site:  
<http://w3.ibm.com/sales/support/americas>

"Valee Bartels" <VBartels@Akerman.com>

10/21/2003 04:04 PM

To: Melanie Esquivel/Boca Raton/Contr/IBM@ibmus

cc:

Subject: BOC9-2003-0045/6169-416

Hi, Melanie. Have you received the formals for 6169-416? We have to file -415, -416 & -417 together. I only have the formals so far for 6169-415.

Thanks!

Valee Bartels  
Legal Assistant to Kevin T. Cuenot  
and Brian K. Buchheit  
Akerman, Senterfitt & Eidson, P.A.  
222 Lakeview Avenue, Suite 400  
West Palm Beach, FL 33401  
Ph: 561.653.5000, ext. 3434  
Fax: 561.659.6313  
E-mail: vbartels@akerman.com

**Valee Bartels - Formal Papers ready for your signature. BOC9-2003-0046 (417)**

---

**From:** "Melanie Esquivel" <esquim@us.ibm.com>  
**To:** "Scott Winters" <swinters@us.ibm.com>  
**Date:** 10/28/2003 11:03 AM  
**Subject:** Formal Papers ready for your signature. BOC9-2003-0046 (417)  
**CC:** "Diana Hovatter" <dhovatte@us.ibm.com>, <vbartels@akerman.com>

---

Hello Scott,  
I am sending you the Formal Papers by Airborne Express Overnight Delivery.  
They will be delivered to your office address Wednesday, October 29, 2003.

Here's another Assignment/Declaration/Oath ready for your signature!  
Method, System, and Apparatus for Scheduling Pattern Based Web Services  
BOC9-2003-0046 (417)

After you have carefully reviewed the documents, please sign them in "blue ink" then:

**Fax a copy to:**

Valee Bartels 561-659-6313 (Akerman & Senterfitt).

**Regular Mail the Original Signed Documents to:**

IBM Corporation  
Melanie Esquivel  
8051 Congress Avenue  
IMAD -4043  
Boca Raton, FL 33487  
Phone: 561-862-2734

Please advise when you will be in the office and/or other arrangements need to be made.  
Please call me if you have any questions.  
Thank you for your quick response.

Thanks,

Melanie Esquivel  
Assistant to:  
Elaine Venturelli, IP Law  
Guy L. Catullo, Nat'l Channels Mgr. Enterprise Storage Solutions  
Kimberly M. Davis, SME Regional Channels Manager  
William Cramsie, Solution Studio Team  
T/L: 975-2734 or 561-862-2734 esquim@us.ibm.com  
Visit the Sales Support Web site:  
<http://w3.ibm.com/sales/support/americas>

**From:** Alaine Allison  
**To:** Esquivel, Melanie  
**Date:** 10/31/03 3:58PM  
**Subject:** BOC9-2003-0046 / Our File 6169-417

Hey Melanie:

I know you've left for the day but can you follow-up with Scott Winters on Monday to see where the formal papers are? Thanks! Glad to be working with you again.

Alaine Allison  
Secretary to Kevin T. Cuenot, Esquire  
and Brian K. Buchheit, Esquire  
AKERMAN SENTERFITT  
222 Lakeview Avenue, Suite 400  
West Palm Beach, FL 33402  
PH: 561-653-5000  
FAX: 561-659-6313  
E-Mail: aallison@akerman.com



EXHIBIT "E"

Docket No.: BOC9-2003-0046 (417)  
Express Mail Label No.: EV 348755964 US

**DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**METHOD, SYSTEM, AND APPARATUS FOR SCHEDULING PATTERN  
BASED WEB SERVICES**

the specification of which is attached hereto and identified by the attorney (IBM) Docket Number appearing above.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

**Prior Foreign Application(s)**

| <u>Number</u> | <u>Country</u> | <u>Day/Month/Year</u> | <u>Priority Claimed</u> |
|---------------|----------------|-----------------------|-------------------------|
|---------------|----------------|-----------------------|-------------------------|

I hereby claim the benefit (a) under Title 35, United States Code, § 119(e) of any U.S. application listed below and identified as a provisional application, or (b) under Title 35, United States Code, § 120 of any U.S. application listed below and not identified as a provisional application, and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior U.S. application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information material to the patentability of this application as defined in Title 37, Code of Federal Regulations, § 1.66 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

**Prior U.S. Application(s)**

| <u>Serial Number</u> | <u>Filing Date</u> | <u>Status</u> |
|----------------------|--------------------|---------------|
|----------------------|--------------------|---------------|

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

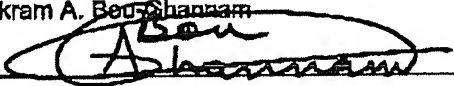
Docket No.: BOC9-2003-0046 (417)  
Express Mail Label No.: EV 346755964 US

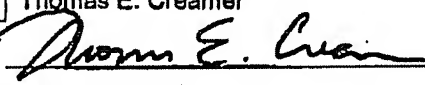
As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:


J. Rodman Steele, Jr. Reg. No. 25,931  
Gregory A. Nelson Reg. No. 30,577  
Joseph W. Bain Reg. No. 34,290  
Robert J. Sacco Reg. No. 35,687  
Stanley Kim Reg. No. 42,730  
Mark D. Passler Reg. No. 40,764  
Kevin T. Cuenot Reg. No. 46,283  
Pablo Meles Reg. No. 33,739  
Neil R. Jetter Reg. No. 46,803

Terry W. Forsythe Reg. No. 47,559  
Michael K. Dixon Reg. No. 46,885  
Sarah E. Smith Reg. No. 50,488  
Amy A. Ostrom Reg. No. 52,088  
Brian K. Buchholtz Reg. No. 52,667  
Peter A. Chiabotti Reg. No. 54,803  
Richard A. Tomlin Reg. No. 24,449

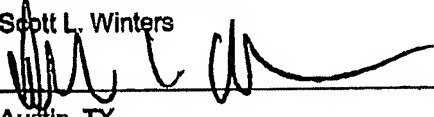
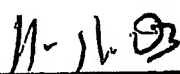
Send correspondence to Gregory A. Nelson, Akerman Senterfitt, 222 Lakeview Avenue, Fourth Floor, P.O. Box 3188, West Palm Beach, Florida 33402-3188 and direct all telephone calls to Gregory A. Nelson at (561) 653-5000.

|                      |  |            |
|----------------------|--|------------|
| First Inventor:      | Akram A. Bou-Shannam   |            |
| Signature:           |  | 10/21/2003 |
| Residence:           | Lake Worth, FL   | Date       |
| Citizenship:         | United States  |            |
| Post Office Address: | 6531 Marbledale Lane, Lake Worth, FL 33467   |            |

|                      |   |            |
|----------------------|---|------------|
| Second Inventor:     | Thomas E. Creamer   |            |
| Signature:           |  | 10/21/2003 |
| Residence:           | Boca Raton, FL  | Date       |
| Citizenship:         | United States   |            |
| Post Office Address: | 12877 Hyland Circle, Boca Raton, FL 33428   |            |

|                      |   |            |
|----------------------|---|------------|
| Third Inventor:      | Victor S. Moore   |            |
| Signature:           |  | 10/28/2003 |
| Residence:           | Boynton Beach, FL   | Date       |
| Citizenship:         | United States   |            |
| Post Office Address: | 4739 Pinetree Drive, Boynton Beach, FL 33436  |            |

Docket No.: BOC9-2003-0046 (417)  
Express Mail Label No.: EV 346755964 US

|                             |   |   |
|-----------------------------|---|---|
| <b>Fourth Inventor:</b>     | Scott L. Winters  |   |
| <b>Signature:</b>           |  |  |
| <b>Residence:</b>           | Austin, TX  | <b>Date</b>   |
| <b>Citizenship:</b>         | United States   |   |
| <b>Post Office Address:</b> | 8000 High Hollow Cove, Austin, TX 78750   |   |